FIG.1

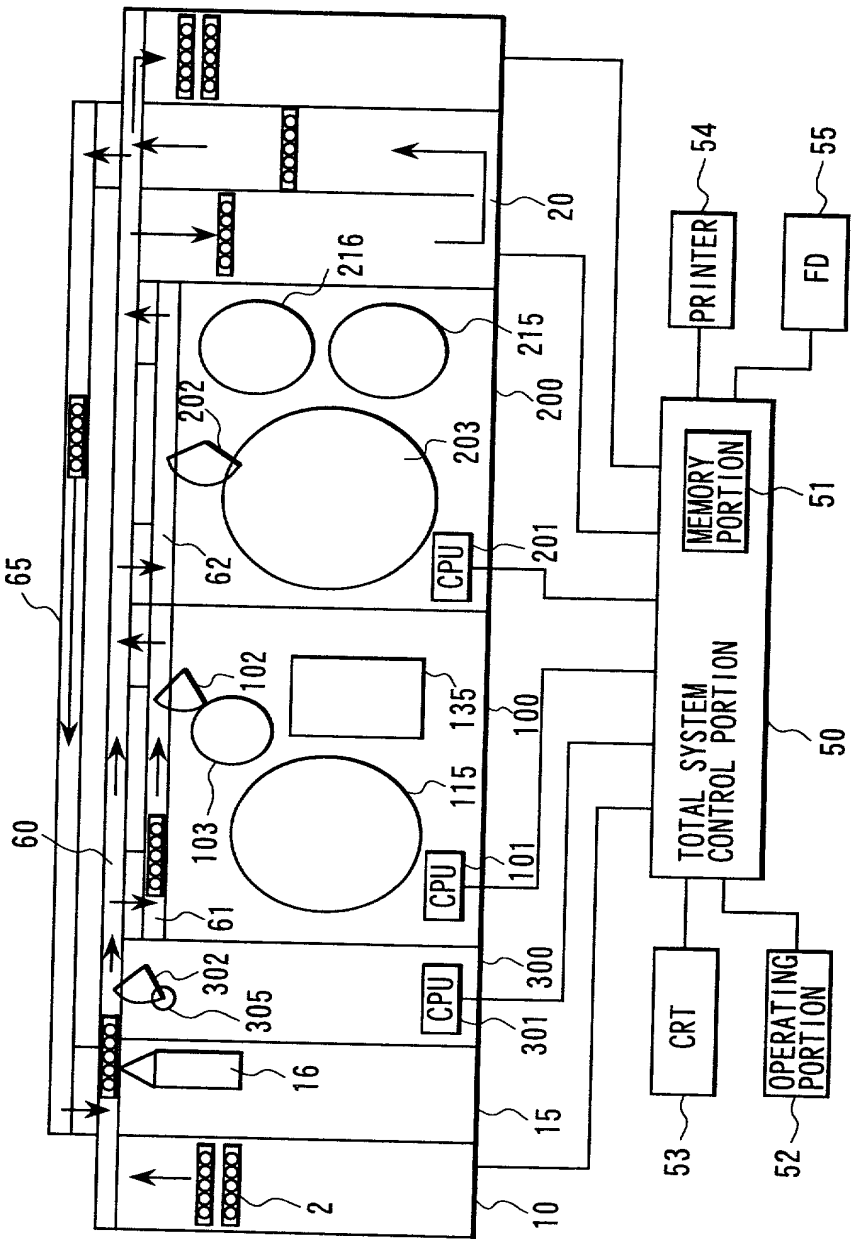

65
60
2
10
15
16
61
62
202
216
215
200
203
20
CPU
201
MEMORY PORTION
51
PRINTER
54
FD
55
102
103
135
100
115
CPU
101
TOTAL SYSTEM CONTROL PORTION
50
302
305
CPU
301
300
CRT
53
OPERATING PORTION
52

FIG.2

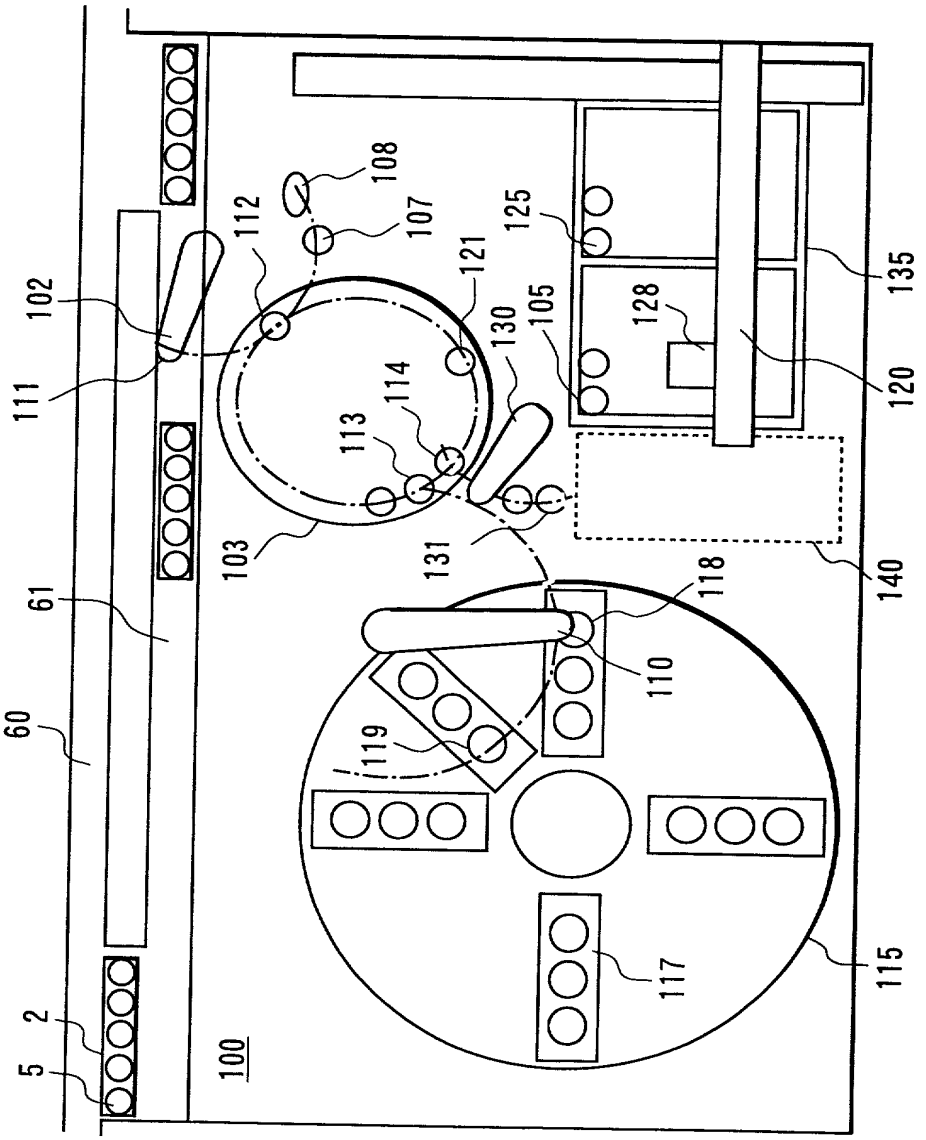

100
5
2
60
61
111
102
112
108
107
121
125
135
103
113
114
130
105
128
120
131
140
118
110
119
117
115

FIG.3

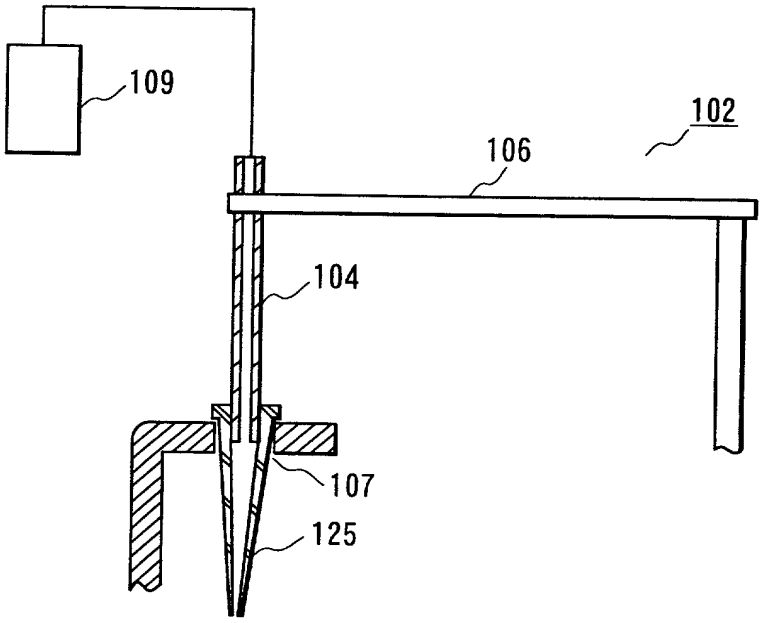
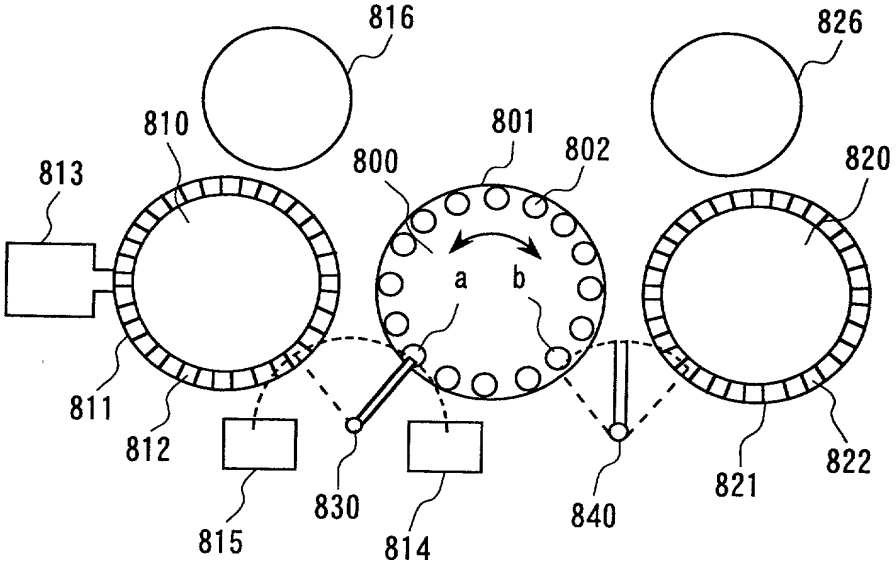



FIG.8




JP2004-095639

FIG.4

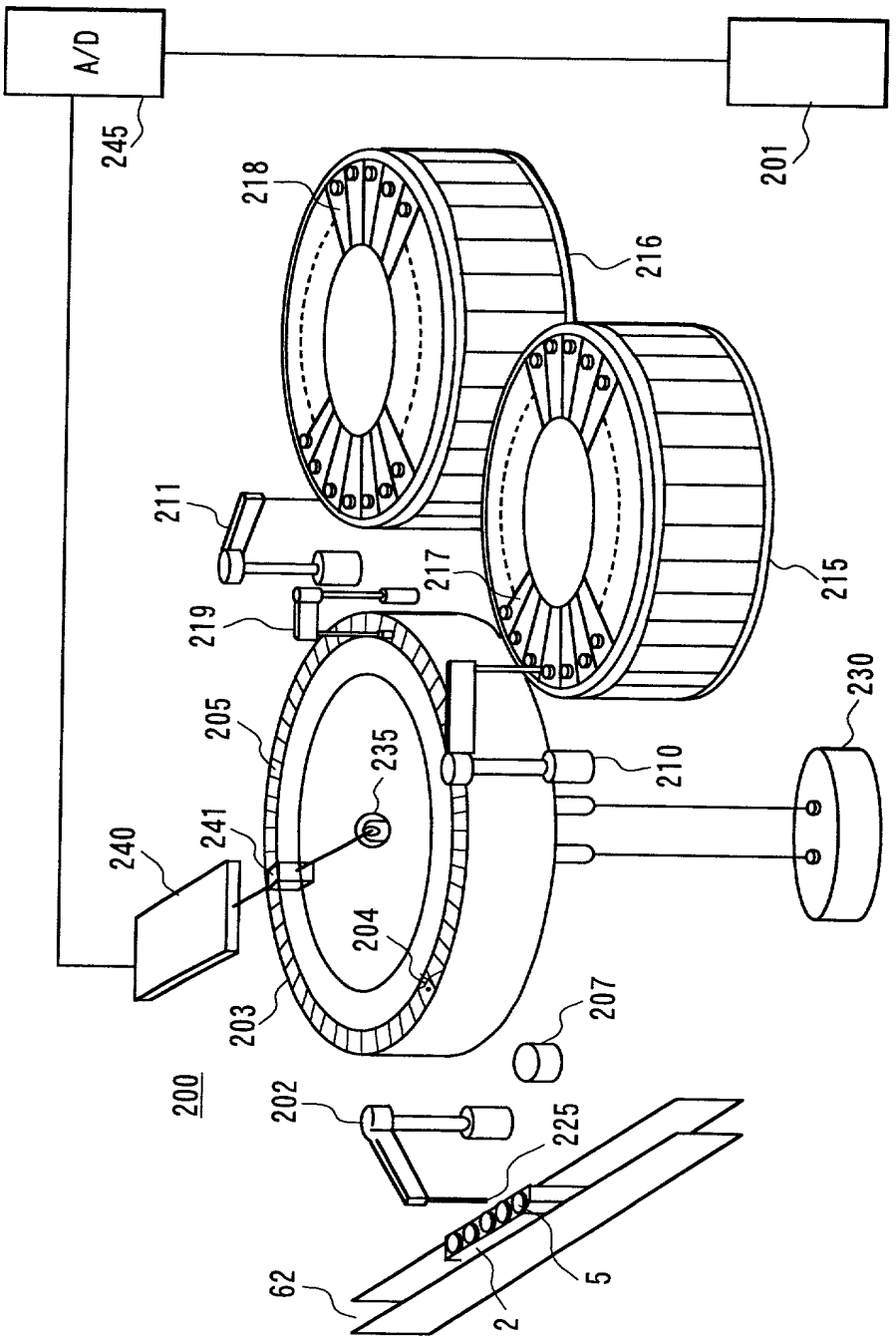

A/D
245
201
218
216
211
217
215
219
205
235
230
210
240
241
204
203
207
200
202
225
62
2
5

FIG.5

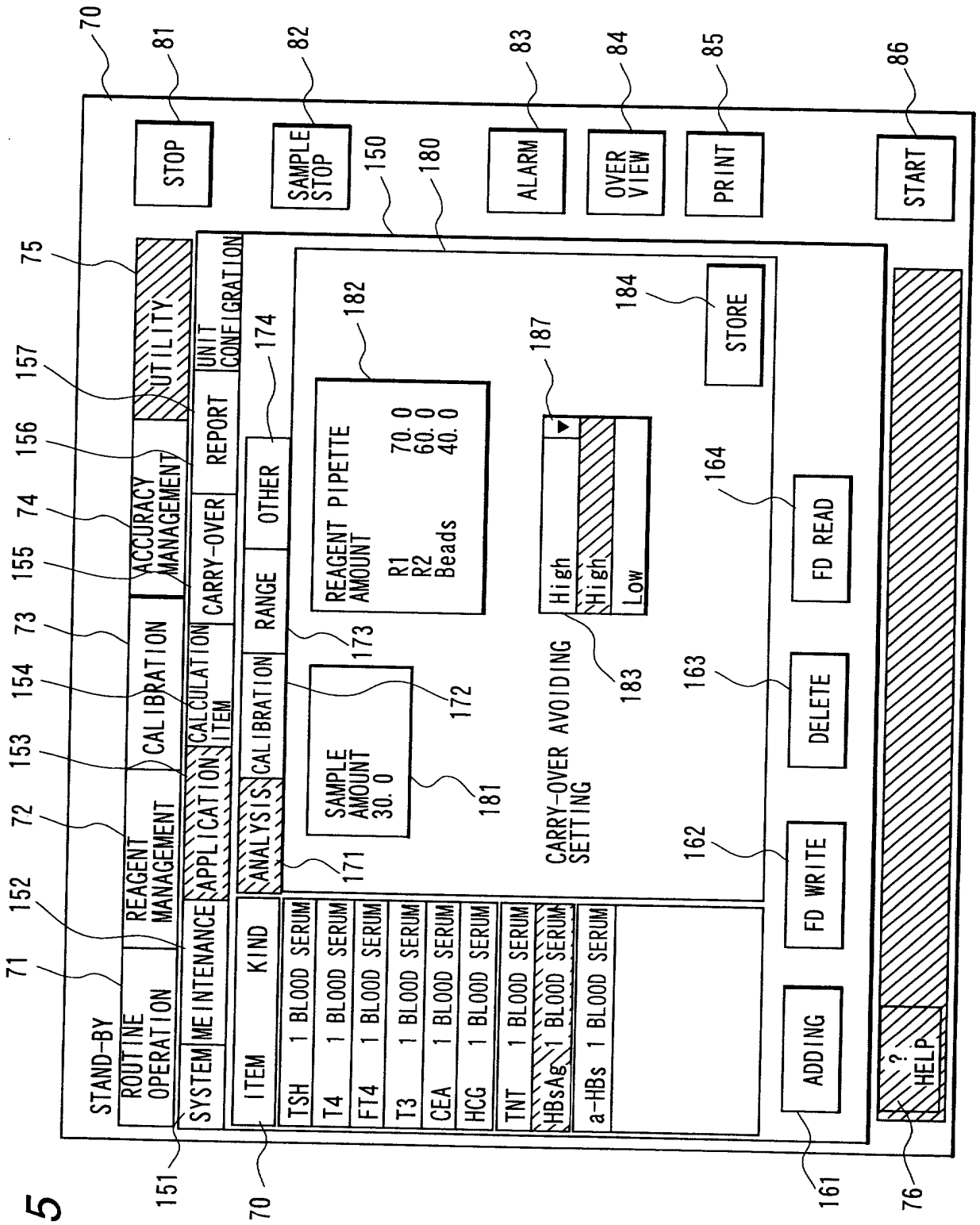

STAND-BY
ROUTINE OPERATION
SYSTEM
MEINTENANCE
REAGENT MANAGEMENT
APPLICATION
CALIBRATION
CALCULATION ITEM
CARRY-OVER
ACCURACY MANAGEMENT
REPORT
UTILITY
UNIT CONFIGRATION
ITEM
KIND
TSH 1 BLOOD SERUM
T4 1 BLOOD SERUM
FT4 1 BLOOD SERUM
T3 1 BLOOD SERUM
CEA 1 BLOOD SERUM
HCG 1 BLOOD SERUM
TNT 1 BLOOD SERUM
HBsAg 1 BLOOD SERUM
a-HBs 1 BLOOD SERUM
ANALYSIS
CALIBRATION
RANGE
OTHER
SAMPLE AMOUNT 30. 0
REAGENT PIPETTE AMOUNT
R1 70. 0
R2 60. 0
Beads 40. 0
CARRY-OVER AVOIDING SETTING
High
High
Low
STOP
SAMPLE STOP
ALARM
OVER VIEW
PRINT
START
STORE
FD READ
DELETE
FD WRITE
ADDING
?
HELP
70
71
72
73
74
75
76
81
82
83
84
85
86
150
151
152
153
154
155
156
157
161
162
163
164
170
171
172
173
174
180
181
182
183
184
187

FIG.6

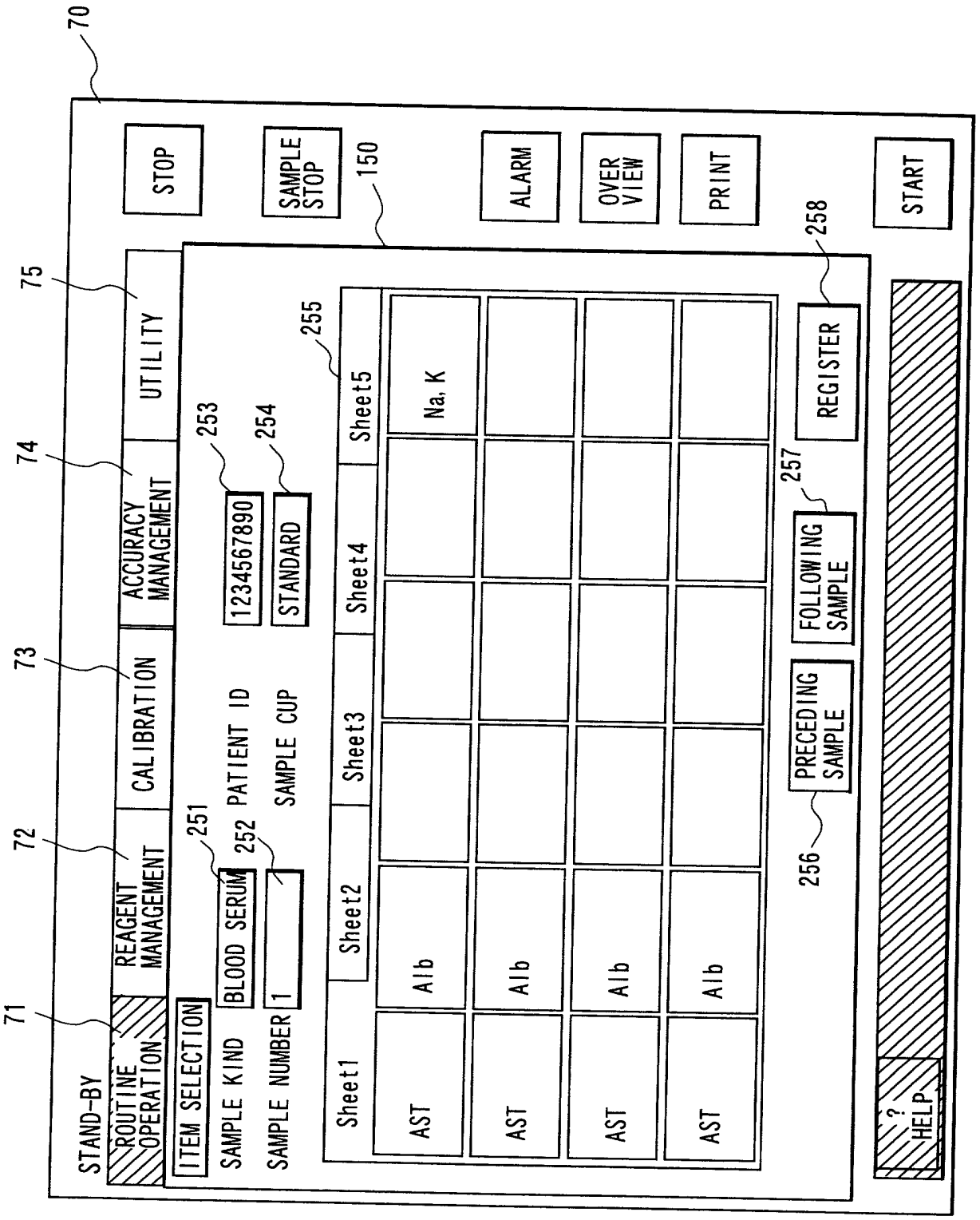

70
71
72
73
74
75
STAND-BY
ROUTINE OPERATION
REAGENT MANAGEMENT
CALIBRATION
ACCURACY MANAGEMENT
UTILITY
STOP
SAMPLE STOP
ALARM
OVER VIEW
PRINT
START
ITEM SELECTION
SAMPLE KIND
BLOOD SERUM
251
SAMPLE NUMBER
1
252
PATIENT ID
1234567890
253
SAMPLE CUP
STANDARD
254
150
255
Sheet1
Sheet2
Sheet3
Sheet4
Sheet5
Na, K
AST
Alb
256
PRECEDING SAMPLE
FOLLOWING SAMPLE
257
REGISTER
258
?
HELP

FIG.7

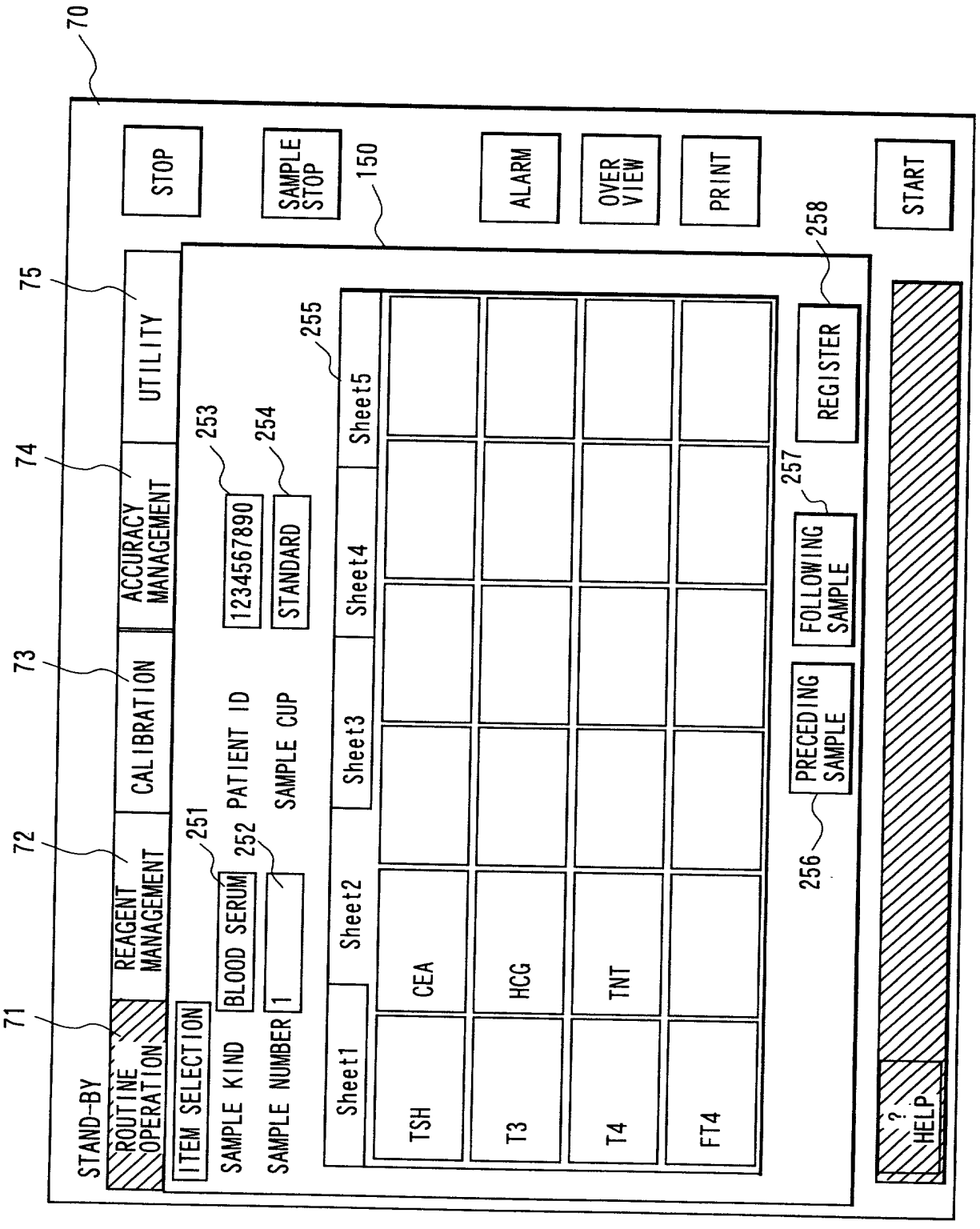

70
71
72
73
74
75
STAND-BY
ROUTINE OPERATION
REAGENT MANAGEMENT
CALIBRATION
ACCURACY MANAGEMENT
UTILITY
STOP
SAMPLE STOP
ALARM
OVER VIEW
PRINT
START
ITEM SELECTION
SAMPLE KIND
BLOOD SERUM
SAMPLE NUMBER
1
PATIENT ID
SAMPLE CUP
1234567890
STANDARD
251
252
253
254
255
150
Sheet1
Sheet2
Sheet3
Sheet4
Sheet5
TSH
CEA
T3
HCG
T4
TNT
FT4
256
PRECEDING SAMPLE
FOLLOWING SAMPLE
257
REGISTER
258
?
HELP

FIG.9

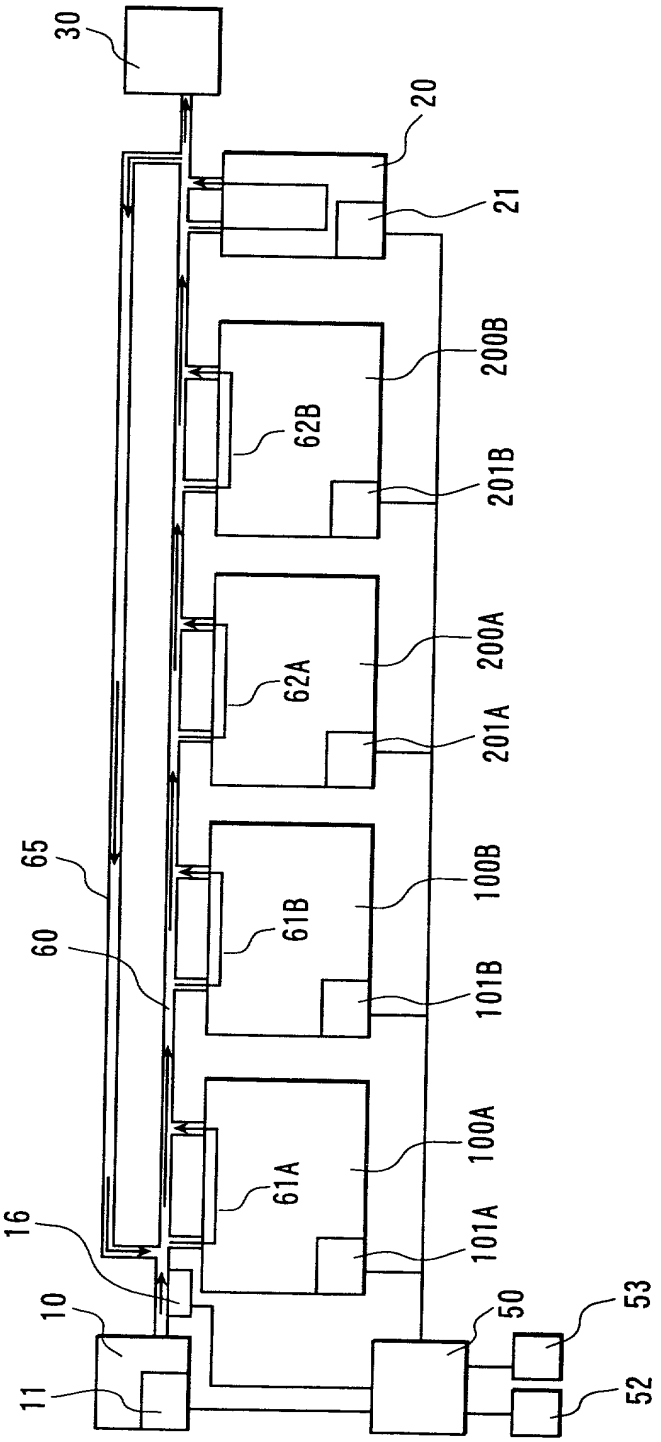

30
20
21
200B
62B
201B
200A
62A
201A
65
100B
61B
60
101B
100A
61A
16
101A
10
50
53
11
52

FIG.10

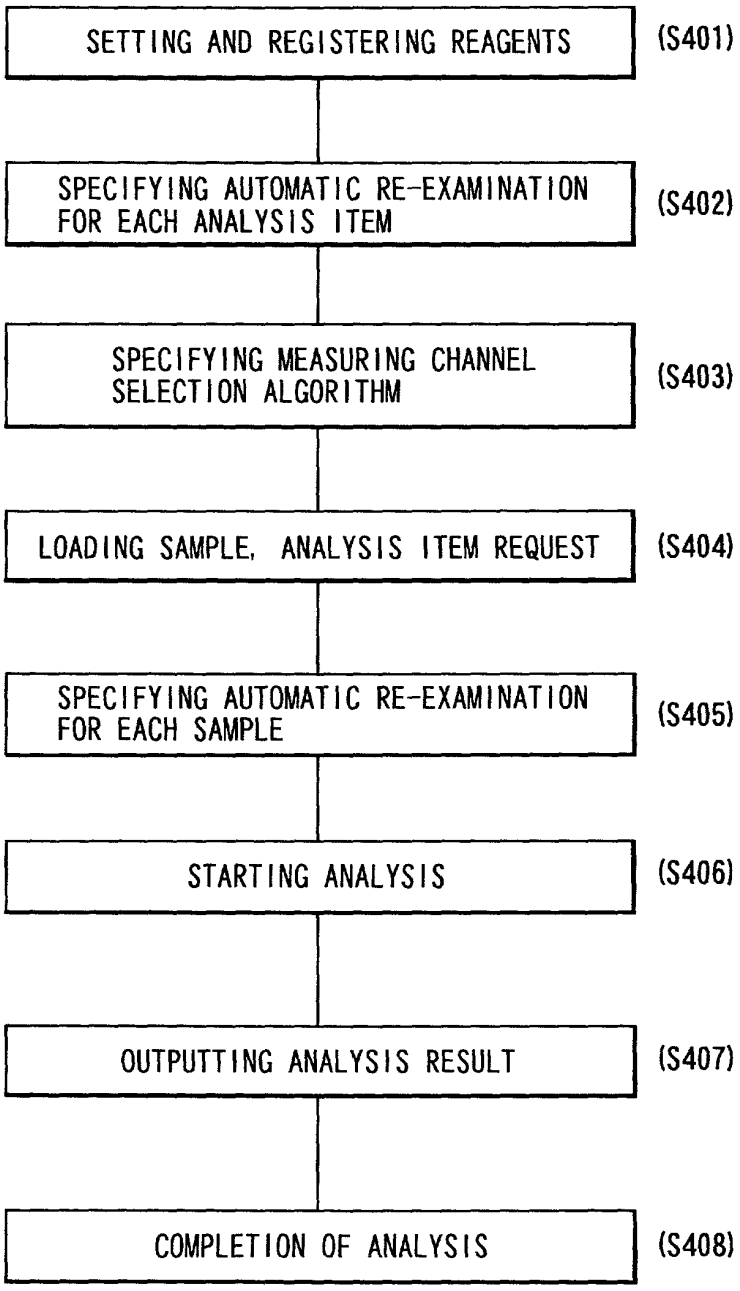

SETTING AND REGISTERING REAGENTS
(S401)
SPECIFYING AUTOMATIC RE-EXAMINATION FOR EACH ANALYSIS ITEM
(S402)
SPECIFYING MEASURING CHANNEL SELECTION ALGORITHM
(S403)
LOADING SAMPLE, ANALYSIS ITEM REQUEST
(S404)
SPECIFYING AUTOMATIC RE-EXAMINATION FOR EACH SAMPLE
(S405)
STARTING ANALYSIS
(S406)
OUTPUTTING ANALYSIS RESULT
(S407)
COMPLETION OF ANALYSIS
(S408)

FIG.11A

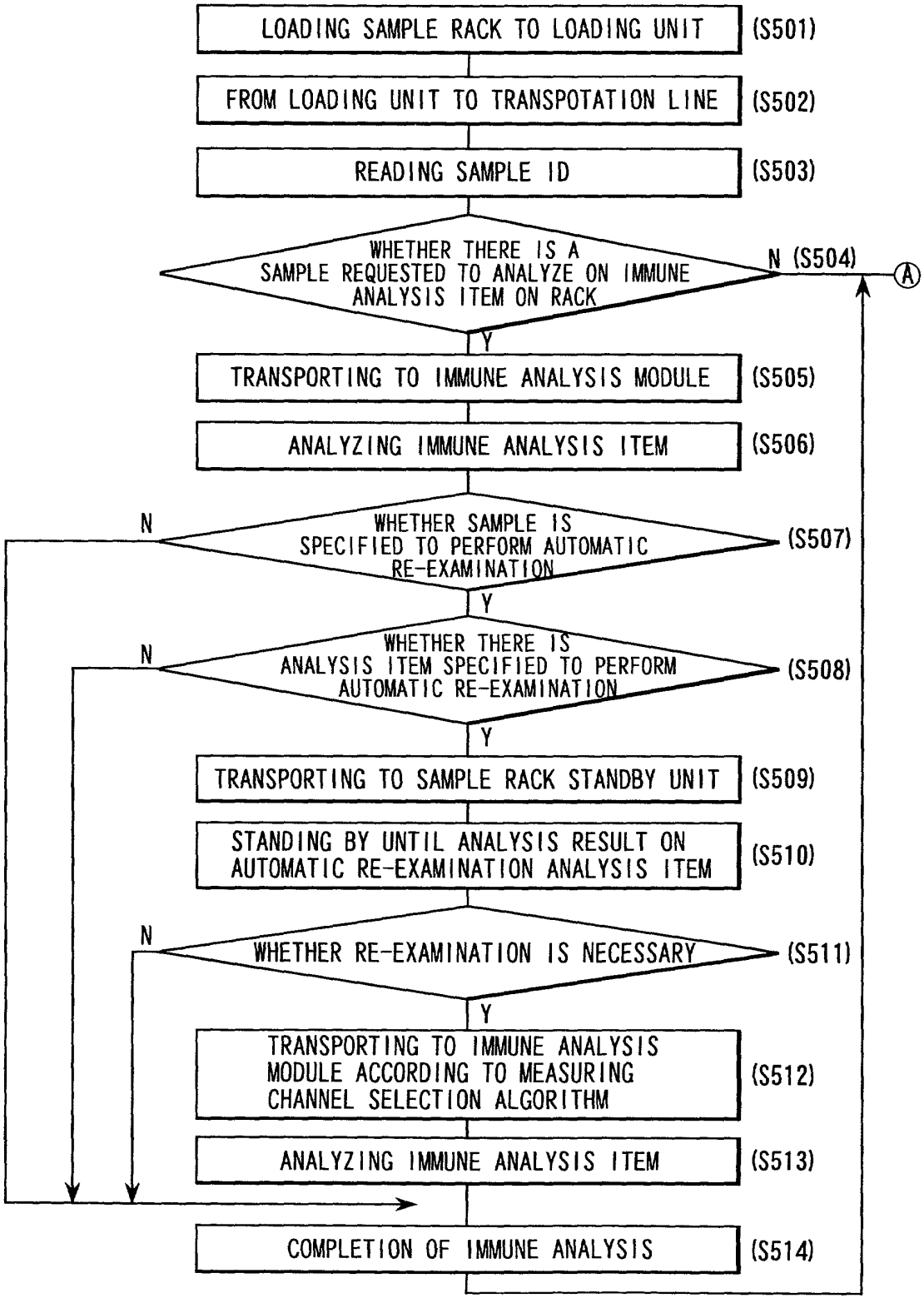
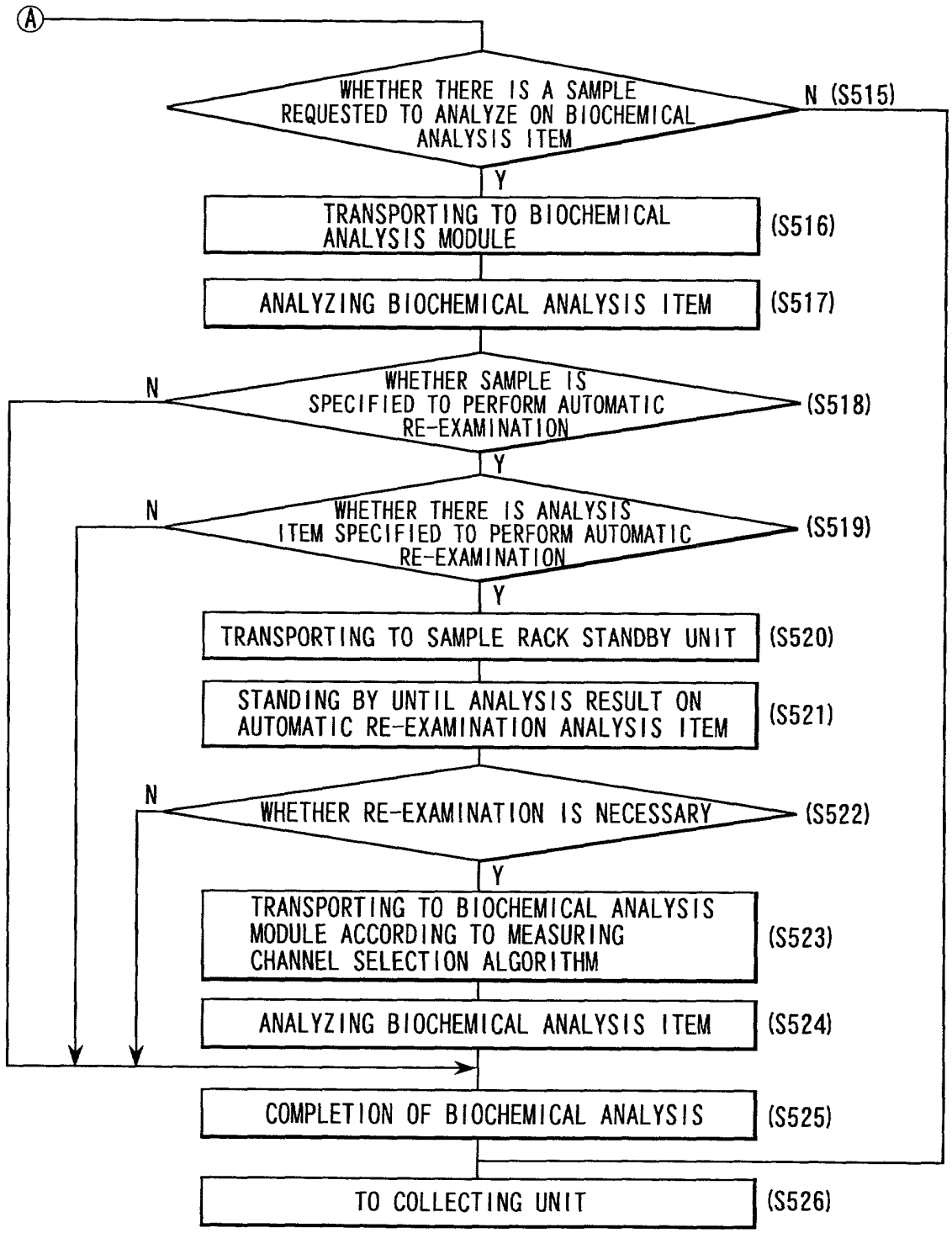

LOADING SAMPLE RACK TO LOADING UNIT
(S501)
FROM LOADING UNIT TO TRANSPOTATION LINE
(S502)
READING SAMPLE ID
(S503)
WHETHER THERE IS A SAMPLE REQUESTED TO ANALYZE ON IMMUNE ANALYSIS ITEM ON RACK
N (S504)
A
Y
TRANSPORTING TO IMMUNE ANALYSIS MODULE
(S505)
ANALYZING IMMUNE ANALYSIS ITEM
(S506)
N
WHETHER SAMPLE IS SPECIFIED TO PERFORM AUTOMATIC RE-EXAMINATION
(S507)
Y
N
WHETHER THERE IS ANALYSIS ITEM SPECIFIED TO PERFORM AUTOMATIC RE-EXAMINATION
(S508)
Y
TRANSPORTING TO SAMPLE RACK STANDBY UNIT
(S509)
STANDING BY UNTIL ANALYSIS RESULT ON AUTOMATIC RE-EXAMINATION ANALYSIS ITEM
(S510)
N
WHETHER RE-EXAMINATION IS NECESSARY
(S511)
Y
TRANSPORTING TO IMMUNE ANALYSIS MODULE ACCORDING TO MEASURING CHANNEL SELECTION ALGORITHM
(S512)
ANALYZING IMMUNE ANALYSIS ITEM
(S513)
COMPLETION OF IMMUNE ANALYSIS
(S514)

FIG.11B


A
WHETHER THERE IS A SAMPLE REQUESTED TO ANALYZE ON BIOCHEMICAL ANALYSIS ITEM
N (S515)
Y
TRANSPORTING TO BIOCHEMICAL ANALYSIS MODULE
(S516)
ANALYZING BIOCHEMICAL ANALYSIS ITEM
(S517)
WHETHER SAMPLE IS SPECIFIED TO PERFORM AUTOMATIC RE-EXAMINATION
N
(S518)
Y
WHETHER THERE IS ANALYSIS ITEM SPECIFIED TO PERFORM AUTOMATIC RE-EXAMINATION
N
(S519)
Y
TRANSPORTING TO SAMPLE RACK STANDBY UNIT
(S520)
STANDING BY UNTIL ANALYSIS RESULT ON AUTOMATIC RE-EXAMINATION ANALYSIS ITEM
(S521)
WHETHER RE-EXAMINATION IS NECESSARY
N
(S522)
Y
TRANSPORTING TO BIOCHEMICAL ANALYSIS MODULE ACCORDING TO MEASURING CHANNEL SELECTION ALGORITHM
(S523)
ANALYZING BIOCHEMICAL ANALYSIS ITEM
(S524)
COMPLETION OF BIOCHEMICAL ANALYSIS
(S525)
TO COLLECTING UNIT
(S526)

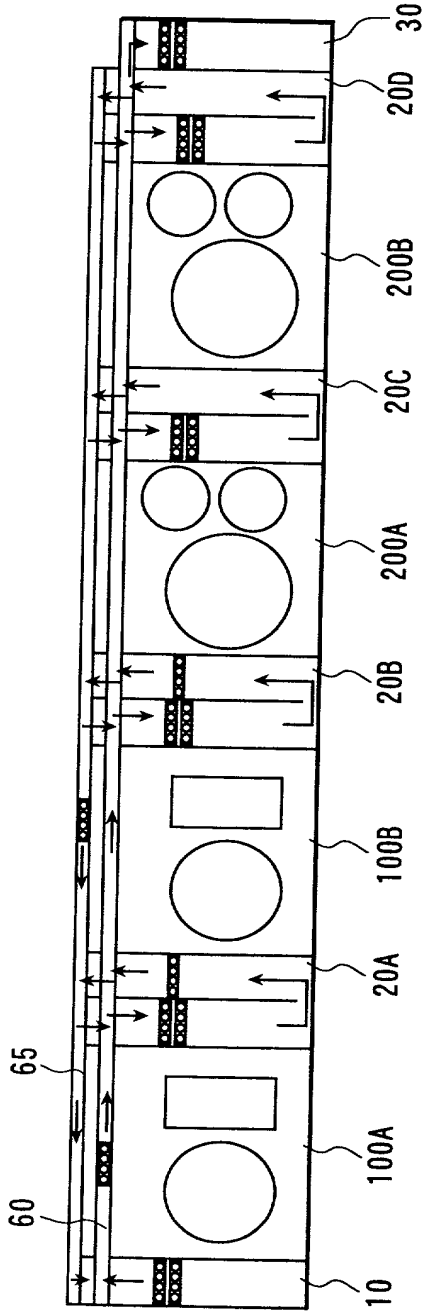



FIG.12